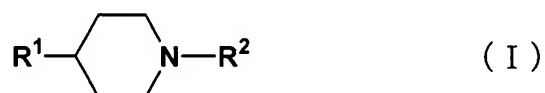


AMENDMENTS TO THE CLAIMS

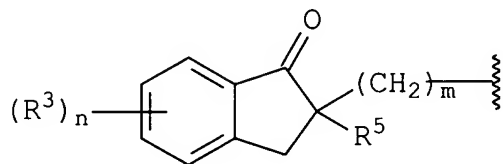
This listing of claims will replace all prior versions, and listings, of claims in the present application.

Listing of Claims:

1. (**Currently Amended**) A compound represented by the formula:



a pharmacologically acceptable salt thereof or hydrates thereof, wherein in the formula, R¹ represents the formula:



wherein:

(R³)s are the same as or different from each other and each represents hydrogen atom, a halogen atom, hydroxyl group, a C₁₋₆ alkyl group, a C₃₋₈ cycloalkyl group, a C₁₋₆ alkoxy group, a C₁₋₆ alkoxyalkoxy group, a halogeno C₁₋₆ alkyl group, a hydroxy C₁₋₆ alkyl group, a cyano C₁₋₆ alkyl group, an amino C₁₋₆ alkyl group, a halogeno C₁₋₆ alkoxy group, a hydroxy C₁₋₆ alkoxy group, a cyano C₁₋₆ alkoxy group, a lower acyl group, nitro group, an optionally substituted amino group, an optionally substituted carbamoyl group, mercapto group or a C₁₋₆ thioalkoxy group;

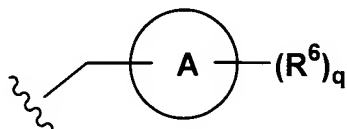
R⁵ represents a halogen atom (provided that fluorine is excluded), hydroxy group, a C₁₋₆ alkyl group, a C₁₋₆ alkoxy group, cyano group, a

halogeno C₁₋₆ alkyl group, ~~a hydroxy C₁₋₆ alkyl group~~, a cyano C₁₋₆ alkyl group, an amino C₁₋₆ alkyl group, nitro group, an azido group, an optionally substituted amino group, an optionally substituted carbamoyl group, an optionally substituted carboxyl group, mercapto group or a C₁₋₆ thioalkoxy group;

m is 0 or an integer from 1 to 6; and

n is an integer from 1 to 4; and

R² represents a C₃₋₈ cycloalkylmethyl, a 2,2-(alkylenedioxy)ethyl or a group represented by the formula:



wherein:

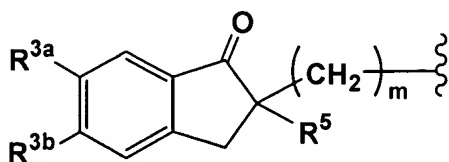
the ring A represents a benzene ring or a heterocyclic ring;

(R⁶)_s are the same as or different from each other and each represents hydrogen, a halogen atom, hydroxyl group, nitrile group, a C₁₋₆ alkyl group, a C₃₋₈ cycloalkyl group, a C₁₋₆ alkoxy group, a C₁₋₆ alkoxyalkoxy group, an aryloxy group, an aralkyloxy group, a halogeno C₁₋₆ alkyl group, a hydroxy C₁₋₆ alkyl group, a cyano C₁₋₆ alkyl group, a halogeno C₁₋₆ alkoxy group, a hydroxy C₁₋₆ alkoxy group, a cyano C₁₋₆ alkoxy group, a lower acyl group, nitro group, an optionally substituted amino group, an optionally substituted amide group, mercapto group or a C₁₋₆ thioalkoxy group, and

two of the R^6 may together form an aliphatic ring, an aromatic ring, a heterocyclic ring or an alkylenedioxy ring; and

q is 0 or an integer from 1 to 5.

2. (**Currently Amended**) The compound according to Claim 1, a pharmacologically acceptable salt thereof or hydrates thereof, wherein R^1 is represented by the formula:



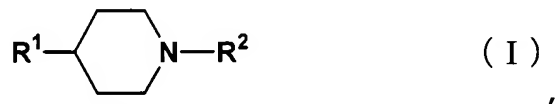
in which R^{3a} and R^{3b} are the same as or different from each other and each represents a C_{1-6} alkoxy group;

R^5 represents a halogen atom (provided that fluorine is excluded), hydroxy group, a C_{1-6} alkyl group, a C_{1-6} alkoxy group, cyano group, a halogeno C_{1-6} alkyl group, ~~a hydroxy C_{1-6} alkyl group~~, a cyano C_{1-6} alkyl group, an amino C_{1-6} alkyl group, nitro group, an azido group, an optionally substituted amino group, an optionally substituted carbamoyl group, an optionally substituted carboxyl group, mercapto group or a C_{1-6} thioalkoxy group; and

m is 0 or an integer from 1 to 6.

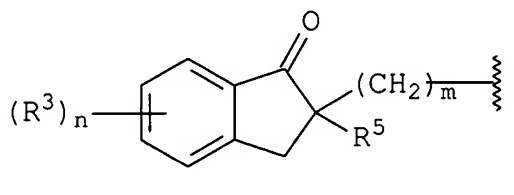
3. (**Original**) The compound according to Claim 2, a pharmacologically acceptable salt thereof or hydrates thereof, wherein R^{3a} and R^{3b} are methoxy groups.

4. (Currently Amended) The A compound represented by the formula:



~~according to any of Claims 1 to 3,~~ a pharmacologically acceptable salt thereof or hydrates thereof,

wherein in the formula, R¹ represents the formula:



wherein:

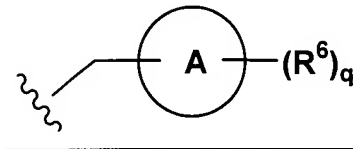
(R³)s are the same as or different from each other and each represents hydrogen atom, a halogen atom, hydroxyl group, a C₁₋₆ alkyl group, a C₃₋₈ cycloalkyl group, a C₁₋₆ alkoxy group, a C₁₋₆ alkoxyalkoxy group, a halogeno C₁₋₆ alkyl group, a hydroxy C₁₋₆ alkyl group, a cyano C₁₋₆ alkyl group, an amino C₁₋₆ alkyl group, a halogeno C₁₋₆ alkoxy group, a hydroxy C₁₋₆ alkoxy group, a cyano C₁₋₆ alkoxy group, a lower acyl group, nitro group, an optionally substituted amino group, an optionally substituted carbamoyl group, mercapto group or a C₁₋₆ thioalkoxy group;

~~wherein~~ R⁵ is chlorine or bromine. bromine;

m is 0 or an integer from 1 to 6; and

n is an integer from 1 to 4; and

R² represents a C₃₋₈ cycloalkylmethyl, a 2,2-(alkylenedioxy)ethyl or a group represented by the formula:

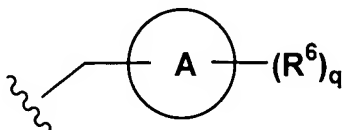


wherein:

the ring A represents a benzene ring or a heterocyclic ring;
(R⁶)s are the same as or different from each other and each
represents hydrogen, a halogen atom, hydroxyl group, nitrile group,
a C₁₋₆ alkyl group, a C₃₋₈ cycloalkyl group, a C₁₋₆ alkoxy group, a C₁₋
₆ alkoxyalkoxy group, an aryloxy group, an aralkyloxy group, a
halogeno C₁₋₆ alkyl group, a hydroxy C₁₋₆ alkyl group, a cyano C₁₋₆
alkyl group, a halogeno C₁₋₆ alkoxy group, a hydroxy C₁₋₆ alkoxy
group, a cyano C₁₋₆ alkoxy group, a lower acyl group, nitro group,
an optionally substituted amino group, an optionally substituted
amide group, mercapto group or a C₁₋₆ thioalkoxy group, and
two of the R⁶ may together form an aliphatic ring, an aromatic
ring, a heterocyclic ring or an alkylenedioxy ring; and
q is 0 or an integer from 1 to 5.

5. (Original) The compound according to Claim 1, a pharmacologically acceptable salt thereof or hydrates thereof, wherein m is 1.

6. (**Previously Presented**) The compound according to Claim 1, a pharmacologically acceptable salt thereof or hydrates thereof, wherein R^2 is a group represented by the formula:



wherein:

the ring A represents a benzene ring or a heterocyclic ring;

$(R^6)_s$ are the same as or different from each other and each represents hydrogen, a halogen atom, hydroxyl group, nitrile group, a C_{1-6} alkyl group, a C_{3-8} cycloalkyl group, a C_{1-6} alkoxy group, a C_{1-6} alkoxyalkoxy group, an aryloxy group, an aralkyloxy group, a halogeno C_{1-6} alkyl group, a hydroxy C_{1-6} alkyl group, a cyano C_{1-6} alkyl group, a halogeno C_{1-6} alkoxy group, a hydroxy C_{1-6} alkoxy group, a cyano C_{1-6} alkoxy group, a lower acyl group, nitro group, an optionally substituted amino group, an optionally substituted amide group, mercapto group or a C_{1-6} thioalkoxy group, and

two of the R^6 may together form an aliphatic ring, an aromatic ring, a heterocyclic ring or an alkylenedioxy ring; and

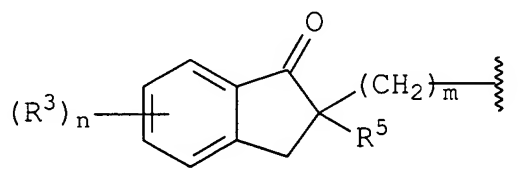
q is 0 or an integer from 1 to 5.

7. (**Original**) The compound according to Claim 6, a pharmacologically acceptable salt thereof or hydrates thereof, wherein the ring A is a benzene ring.

8. (Currently Amended) ~~The compound according to Claim 6, A~~
compound represented by the formula:



a pharmacologically acceptable salt thereof or hydrates thereof, wherein
in the formula, R¹ represents the formula:



wherein:

(R³)s are the same as or different from each other and each
represents hydrogen atom, a halogen atom, hydroxyl group, a C₁-₆
alkyl group, a C₃-₈ cycloalkyl group, a C₁-₆ alkoxy group, a C₁-₆
alkoxyalkoxy group, a halogeno C₁-₆ alkyl group, a hydroxy C₁-₆ alkyl
group, a cyano C₁-₆ alkyl group, an amino C₁-₆ alkyl group, a
halogeno C₁-₆ alkoxy group, a hydroxy C₁-₆ alkoxy group, a cyano C₁-₆
alkoxy group, a lower acyl group, nitro group, an optionally
substituted amino group, an optionally substituted carbamoyl group,
mercapto group or a C₁-₆ thioalkoxy group;

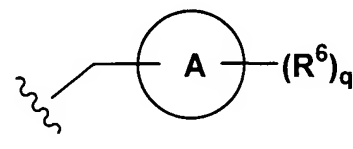
R⁵ represents a halogen atom (provided that fluorine is
excluded), hydroxy group, a C₁-₆ alkyl group, a C₁-₆ alkoxy group,
cyano group, a halogeno C₁-₆ alkyl group, a hydroxy C₁-₆ alkyl group,

a cyano C₁₋₆ alkyl group, an amino C₁₋₆ alkyl group, nitro group, an azido group, an optionally substituted amino group, an optionally substituted carbamoyl group, an optionally substituted carboxyl group, mercapto group or a C₁₋₆ thioalkoxy group;

m is 0 or an integer from 1 to 6; and

n is an integer from 1 to 4; and

R² represents a C₃₋₈ cycloalkylmethyl, a 2,2-(alkylenedioxy)ethyl or a group represented by the formula:



wherein the ring A is a pyridine ring.

(R⁶)s are the same as or different from each other and each represents hydrogen, a halogen atom, hydroxyl group, nitrile group, a C₁₋₆ alkyl group, a C₃₋₈ cycloalkyl group, a C₁₋₆ alkoxy group, a C₁₋₆ alkoxyalkoxy group, an aryloxy group, an aralkyloxy group, a halogeno C₁₋₆ alkyl group, a hydroxy C₁₋₆ alkyl group, a cyano C₁₋₆ alkyl group, a halogeno C₁₋₆ alkoxy group, a hydroxy C₁₋₆ alkoxy group, a cyano C₁₋₆ alkoxy group, a lower acyl group, nitro group, an optionally substituted amino group, an optionally substituted amide group, mercapto group or a C₁₋₆ thioalkoxy group, and two of the R⁶ may together form an aliphatic ring, an aromatic ring, a heterocyclic ring or an alkylenedioxy ring; and

q is 0 or an integer from 1 to 5.

9. (Original) The compound according to Claim 6, a pharmacologically acceptable salt thereof or hydrates thereof, wherein q is an integer of 1 or 2.

10. (Currently Amended) The compound according to Claim 1, a pharmacologically acceptable salt thereof or hydrates thereof, which is selected from the group consisting of:

1-benzyl-4-[(5,6-dimethoxy-2-chloro-1-indanon)-1-yl]methylpiperidine,

1-benzyl-4-[(5,6-dimethoxy-2-bromo-1-indanon)-2-yl]methylpiperidine,

1-benzyl-4-[(5,6-dimethoxy-2-iodo-1-indanon)-2-yl]methylpiperidine,

1-benzyl-4-[(5,6-dimethoxy-2-hydroxy-1-indanon)-2-

yl]methylpiperidine,

1-benzyl-4-[(5,6-dimethoxy-2-methyl-1-indanon)-2-yl]methylpiperidine,

1-benzyl-4-[(5,6-dimethoxy-2-ethyl-1-indanon)-2-yl]methylpiperidine,

1-benzyl-4-[(5,6-dimethoxy-2-azido-1-indanon)-2-yl]methylpiperidine,

1-benzyl-4-[(5,6-dimethoxy-2-amino-1-indanon)-2-yl]methylpiperidine,

1-benzyl-4-[(5,6-dimethoxy-2-methylamino-1-indanon)-2-

yl]methylpiperidine,

1-benzyl-4-[(5,6-dimethoxy-2-dimethylamino-1-indanon)-2-

yl]methylpiperidine, and

1-benzyl-4-[(5,6-dimethoxy-2-acetamide-1-indanon)-2-

yl]methylpiperidine.

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~~1-benzyl-4-[(5,6-dimethoxy-2-methanesulfonamide-1-indanon)-2-yl]methylpiperidine,~~
~~3-(1-benzylpiperidin-4-yl)-2-chloro-1-(2,3,4,5-tetrahydro-1H-1-benzoazepin-8-yl)-1-propanone,~~
~~3-(1-benzylpiperidin-4-yl)-2,2-dichloro-1-(2,3,4,5-tetrahydro-1H-1-benzoazepin-8-yl)-1-propanone,~~
~~5,7-dihydro-3-[1-chloro-2-[(1-(phenylmethyl)-4-piperidinyl)ethyl]-6H-pyrrolo[4,5-f]-1,2-benzoisoxazol-6-one,~~
~~5,7-dihydro-3-[1,1-dichloro-2-[(1-(phenylmethyl)-4-piperidinyl)ethyl]-6H-pyrrolo[4,5-f]-1,2-benzoisoxazol-6-one,~~
~~1-(2-methyl-6-benzothiazolyl)-3-[1-(phenylmethyl)-4-piperidinyl]-2-chloro-1-propanone, and~~
~~1-(2-methyl-6-benzothiazolyl)-3-[1-(phenylmethyl)-4-piperidinyl]-2,2-dichloro-1-propanone.~~

11-14. (Canceled)

15. (Currently Amended) A medical composition comprising:

a pharmacologically effective amount of the compound according to Claim 1, a pharmacologically acceptable salt thereof or hydrates thereof; and

a pharmacologically acceptable carrier.

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16-20. (**Canceled**)

21. (**Previously Presented**) A method of treating or ameliorating various types of senile dementia or cerebrovascular dementia, which comprises administering a pharmacologically effective amount of the compound according to Claim 1, a pharmacologically acceptable salt thereof or hydrates thereof to a patient.